

遥感技术在城市地质调查中的应用

于学政, 杨日红, 贲卫平

(中国国土资源航空物探遥感中心, 北京 100083)

摘要: 国家越发达、地区越发达地质工作程度越高, 而中国现实却是, 中西部山区地质工作程度较高, 东部城市或平原地区的地质工作程度则相对较低, 这极不适应快速进步的经济、社会需求。在即将开展的城市地质调查暨立体地质填图的规划中, 遥感作为一种伴随城市地质调查而发展起来的先进技术, 必将在城市广义地学和国土资源调查中大显身手。本文重点介绍遥感技术在第四纪地质、地貌单元划分、地质灾害预警与监测、城市化动态过程追溯以及城市生态环境等诸多领域服务于城市地质调查和经济、社会需求等方面可以发挥的技术优势。

关键词: 遥感技术; 城市地质调查; 地质灾害; 预警与监测

中图分类号: P 622, P 627 **文献标识码:** A **文章编号:** 1671-2552 (2003) 08-0580-09

Application of the remote sensing technique in urban geological survey

YU Xue-zheng, YANG Ri-hong, BEN Wei-ping

China Aero Geophysical Survey and Remote Sensing Center for Land and Resources, Beijing 100083, China

Abstract: If a country or region is developed, its geological work extent is also higher. The reality in China is, however, that the geological work extent in mountains areas in central and western China is higher while that in urban or plain areas in eastern China is relatively low, which cannot meet the demands for the rapidly developing economy and society. In the planning of urban geological survey and stereographic geological mapping that are about to be carried out, remote sensing as an advanced technique that has developed in company with urban geological survey is bound to give full play its to own advantages in urban geoscience sensu lato and land and resource survey. This paper mainly introduces the advantages of remote sensing techniques in many areas of serving urban geological survey and economic and social demands, such as the stratigraphic division of the Quaternary, division of geomorphological units, early warning and monitoring of geological disasters, tracing of the dynamic process of urbanization and urban eco-environment.

Key words: remote sensing technique; urban geological survey; geological disaster; early warning and monitoring